



Ethernet Transmission

The Optiva OTP-1GE provides for the transmission of 1 channel of 10/100/1000 Ethernet signals, over long or short distances, using a single fiber. It also features a 4-port non-blocking Ethernet switch so multiple devices can be plugged in simultaneously.

In addition, the OTP-1GE is part of our innovative Optiva video, audio and data media transport system. Optiva was designed to maintain lossless fiber extension between input and output signals. New signals may be added without the need for additional fiber through our proprietary daisy-chain technology. The Optiva line of products also includes insert cards for up to 16 channels of multiplexing / demultiplexing, 16x16 matrix switching, optical add / drop, as well as remote system monitoring.

Features

- 10/100/1000 Ethernet over Fiber
- Singlemode Options (up to 70 km)
- Multimode Options (up to 3 km)
- Supports Ethernet QoS (Optional)
- Supports IEEE 802.3, 802.3u, 802.1p & 802.3ab standards
- 3-Year Warranty
- RoHS Compliant

Applications

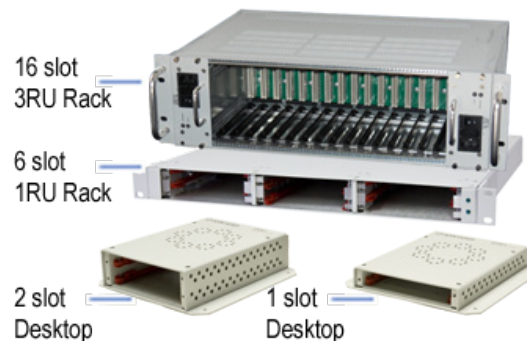
- LAN/WAN Data Communication
- Short Distance Ethernet
- Campus Networking
- Temporary Data Feeds
- Video over IP Extension

System Design

Optiva insert cards support both 19" rackmount and compact tabletop or wall-mountable enclosures. The 3RU 19" rackmount enclosures (Models: OT-CC-16 & OT-CC-16F) can support up to 16 insert cards as well as dual-redundant, hot-swappable power supplies utilizing two 100 watt or two 200 watt power supplies. Also available in the rackmount form factor is our 1RU enclosure (Model: OT-CC-6-1U) which can accommodate six insert cards and utilizes two 60 watt power supplies. For desktop or wall mounting applications there are one-slot (Model: OT-DTCR-1) and two-slot (Model: OT-DTCR-2) enclosures. Both use an external wall mount power supply.

optiva | PLATFORM

Enclosure Options



U.S. Patent #'s 7720385 & 8064773

DATASHEET **FIBER OPTICS**

Models

Transceiver
OTP-1GETR-A0-LC
OTP-1GETR-A1-LC
OTP-1GETR-A2-LC
OTP-1GETR-A2D-LC
OTP-1GETR-A3-LC
OTP-1GETR-A3D-LC
OTP-1GETR-L4x1-LC
OTP-1GETR-NOC

- Standard connector type is UPC
- NOC: non-optical card (no SFP)

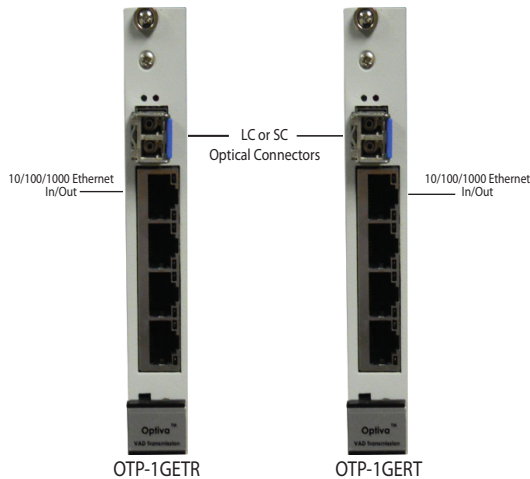
Transmitter	Receiver
OTP-1GETR-A1/A3M-SC	OTP-1GERT-A3M/A1-SC
OTP-1GETR-A2/A3-SC	OTP-1GERT-A3/A2-SC

Optical Specifications

Optical Code	Fiber Type / Number	Wavelength (nm)	Optical Budget (dB)	Distance (km)
A0	MM / 2	850/850	7	0.5
A1	MM / 2	1310/1310	5	3
A2	SM / 2	1310/1310	7	10
A2D	SM / 2	1310/1310	12	20
A3	SM / 2	1550/1550	17	40
A3D	SM / 2	1550/1550	25	60
A1/A3M	MM / 1	1310/1550	5	3
A2/A3	SM / 1	1310/1550	12	20
L4x1	SM / 2	1270-1610 CWDM	25	20-70

- Chromatic dispersion as well as other losses should also be taken into account
- Stated distances are the maximum range, shorter distance may require attenuation

Connection Diagram



Ethernet

Specifications	Values
Standard	IEEE 802.3, 802.3u, 802.3ab, 802.3x, 802.1p; QoS (optional)
Data Rate	10/100/1000 Mbps
Connector	RJ-45
MAC Address Table	1 Kbyte
Packet Buffer Memory	1 Mbit
Jumbo Frames	Up to 10K Bytes
Ports	4

General

Specifications	Values
Dimensions (Insert Card)	6.69" L x 0.81" W x 5.06" H
Weight	11 oz.
Operating Temperature	0°C to +50°C
Storage Temperature	-40°C to +85°C
Humidity	0 to 95% (non-condensing)
Operating Voltage	9-12 VDC
Power Consumption	6 Watts
Bit Error Rate	10 ⁻¹⁴
System Latency	< 1 ms
Warranty	3 Year

Monitoring & Control

Specifications	Values
Local	Front panel LED status and alert indicators
Remote	OptivaView SNMP Management Suite*

- Requires OptivaView SNMP Controller Card (Model: OPV-CTRL)

Compliance

